

## **2.1 Sydney Water, Water & Sewer Infrastructure**

The potable water supply to the Hospital site is currently serviced by two (2) separate water supply connections; the primary supply is by a 250mm diameter Sydney Water watermain supplied from The Parkway Road crossing to the west of Appin Road with the secondary supply coming from a 150mm diameter Sydney Water, water main located in Parkside Crescent.

Backflow prevention to the Hospital Campus' potable cold water service is achieved via dual Reduced Pressure Zone Devices (RPZD) at both points of connection, there is no backflow prevention provided to the incoming Fire services supply. This will need to be provided by Double Detector Check Valve Assemblies (DDCV) on each incoming Fire service supply.

A statement of available pressure and flow has been obtained from Sydney Water for the 250mm diameter primary water services supply from Appin Road. The Statement is attached and identifies the minimum and maximum flows and pressures available from the Sydney Water, watermain.

The minimum / maximum flows available are 0.66 L/sec to 120 L/sec with a maximum / minimum pressure available are 65 m/head to 53 m/head. The flows and pressures stated are more than adequate to supply the Hospital site campus demands for water and fire services, while the pressures obtained indicate that there is no need for the provision of pressure booster pumps for domestic cold water and fire services to be provided to the Hospital buildings.

A 225mm diameter Sydney Water sewer main connection is located on the eastern side of Parkside Crescent. This main then extends west and connects to the Sydney Water 750mm diameter RC sewer trunk main.

A Sydney Water Section 73 Feasibility Application has been lodged and an approval letter received from Sydney Water confirming the adequacy of its sewer and water main network to supply the additional water and sewer demands that the development will produce.

## **2.2 Jemena Natural Gas Network**

The Hospital site is currently serviced by a 100mm diameter Jemena secondary high pressure natural gas main located in Therry Road. Staging regulators and gas meter positioned adjacent to the corner of Central Road, provide the 100kPa natural gas supply to the existing CSB and surrounding facilities.

Jemena has advised that there is adequate capacity within the Natural Gas Network System to supply the proposed Development.

Written application for additional gas loading will need to be lodged to the current Hospital's Gas Retailer, when final additional gas quantities are known.